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EXAMINER

NGUYEN, QUYNH H

ART UNIT PAPER NUMBER

2614

DATE MAILED: 11/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/602,804

Applicant(s)

MCILWAINE ET AL.

Examiner

Quynh H. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 23-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 23-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Applicant's amendment filed 9/18/06 has been entered. Claims 23-24, 33, 39, 44, 46-47, and 53 have been amended. No claims have been cancelled. Claims 57-60 have been added. Claims 23-60 are still pending in this application, with claims 23, 32, 39, 44, 53, and 57 being independent.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 57-60 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 57 recites "...a cyclical change in workload..." is not described in the specification.

Claims 58-60 are rejected because they depend on rejected claim 57.

***Claim Rejections - 35 USC § 103***

5. Claims 23-26, 29, 31, and 39-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foster et al. (U.S. Patent 6,356,632) in view of Sanders et al. (U.S. Patent 6,574,605).

As to claims 23 and 39, Foster et al. teaches the steps of: scheduling a time slot for providing training information to agents without disrupting the agent's interaction duties (abstract; col. 3, lines 14-17); terminating the interaction duties for the agent before providing the training information to the agent (col. 5, lines 39-41). Since agent's schedule breaks or training session are scheduled in advance (Fig. 3, 200; col. 5, lines 35-41), hence it would have been obvious to one of ordinary skill in the art at the time the invention was made that the agent already knows ahead of time the time of the scheduled time slot that the training information is available.

Foster et al. does not teach processing historical call volume data to identify a call volume pattern in the historical call volume data; and predicting a time during which call volume is expected to be at a declined level based on the identified call volume pattern.

Sanders et al. teach processing historical call volume data to identify a call volume pattern in the historical call volume data (col. 10, line 66 through col. 11, line 2; col. 17, lines 64-64 and line 67 through col. 18, line 1); and predicting call volume (col. 8, lines 30-31) based on the identified call volume pattern (col. 10, line 66 though col. 11, line 2; col. 6, lines 35-38 and lines 45-46 - *where Sanders discussed the planner*

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*initiate training processes based on reviewing current and future requirements, hence one can identify the differences in call volume, for example, increased or declined).*

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Sanders into the teachings of Foster for the purpose of supporting accurate volume forecasting to avoid unnecessary resource reallocation, as discussed by Sanders (col. 2, lines 53-56).

As to claim 24, Foster et al. teaches terminating the interaction duties comprises the agent spontaneously electing to terminate the agent's interaction duties to receive the training information (col. 3, lines 10-17; col. 5, lines 39-41); and the limitation "identifying the call volume pattern comprises identifying periodic occurrences of declined levels of call volume from an earlier time period" is rejected for the same reasons as discussed above with respect to claim 1, second limitation.

As to claims 25 and 41, Foster et al. teaches monitoring the agent to determine whether the agent is engaged in the interaction duties (col. 6, lines 6-19).

Claim 26 is rejected for the same reasons as discussed above with respect to the fourth limitation of claim 1.

As to claim 29, Foster et al. teaches terminating the training information occurs only if the agent has attained a predetermined performance score (col. 2, lines 16-20).

As to claim 31, Foster et al. teaches a computer-readable medium having computer-executable instructions for performing the steps recited in claim 23 (col. 3, lines 38-57).

As to claim 40, Shaffer et al. teaches monitoring the agent during the predicted time to determine whether the agent is available for the training session; and if the agent is available, delivering the training session to the agent (col. 4, lines 8-12).

As to claim 42, Shaffer et al. teaches the steps of: accepting call center load data from the work distribution component operable for receiving and distributing incoming contacts (col. 4, lines 2-12); analyzing the call center load data to determine when to push a training session for the contact agent (col. 4, lines 8-12).

As to claim 43, Shaffer et al. teaches a computer-readable medium having computer-executable instructions for performing the steps recited in claim 32 (Fig. 1; col. 3, line 62 through col. 4, line 6).

6. Claims 27-28, 30, and 44-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foster et al. (U.S. Patent 6,356,632) in view of Sanders et al. (U.S. Patent 6,574,605) and further in view of Shaffer et al. (U.S. Patent 6,128,380).

As to claim 27, Foster and Sanders do not teach providing the training information from which the agent can select a training segment.

Shaffer et al. teaches providing the training information from which the agent can select a training segment (col. 5, lines 12-18).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Shaffer into the teachings of Foster and Sanders for the purpose of allowing the agent to select what training is suitable for

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him or her, since the agent himself or herself is the one who knows what he or she needed to be trained on.

As to claims 28 and 49, Shaffer et al. teaches monitoring a work distribution component while providing the training information to the agent; and if a workload of the work distribution component exceeds a predetermined criteria, terminating the training information to enable the agent to engage again in the interaction duties (col. 6, lines 37-66).

As to claim 30, Shaffer et al. teaches postponing the training information if the queue becomes very full or no agent engaging in the interaction duties since agents are in training (col. 6, lines 37-42).

As to claim 44, Foster et al. teaches the steps of: scheduling a training session so that the contact agent can accept training information without disrupting the interaction duties of the contact agent (col. 4, lines 11-18); disconnecting the contact agent from a contact engine so that the contact agent does not perform the interaction duties during the training session (col. 3, lines 10-17; col. 5, lines 39-41).

Foster et al. does not explicitly teach identifying past occurrences of lulls in contact center activity; predicting future occurrences of lulls in contact center activity based on the identified past occurrences; providing the training information to the contact agent during the training session; and if the contact center has a workload that exceeds a predetermined threshold, terminating the training session and connecting the contact agent to the contact engine to permit the agent to perform the interaction duties.

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Sanders et al. teach processing historical call volume data to identify a call volume pattern in the historical call volume data (col. 10, line 66 through col. 11, line 2; col. 17, lines 64-64 and line 67 through col. 18, line 1); and predicting call volume (col. 8, lines 30-31) based on the identified call volume pattern (col. 10, line 66 through col. 11, line 2; col. 6, lines 35-38 and lines 45-46 - *where Sanders discussed the planner initiate training processes based on reviewing current and future requirements, hence one can identify the differences in call volume, for example, increased or declined*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Sanders into the teachings of Foster for the purpose of supporting accurate volume forecasting to avoid unnecessary resource reallocation, as discussed by Sanders (col. 2, lines 53-56).

Shaffer et al. teaches providing the training information to the contact agent during the training session (col. 4, lines 6-17); and if the contact center has a workload that exceeds a predetermined threshold, terminating the training session and connecting the contact agent to the contact engine to permit the agent to perform the interaction duties (col. 6, lines 37-42).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Shaffer into the teachings of Foster and Sanders for the purpose of better load balancing in monitoring and managing the performance of the call center.

As to claims 45-47, Schaffer et al. teaches scheduling data for the contact center and identifying the lulls in contact center activity based on processing the received workload data (col. 4, lines 2-12).

As to claim 48, Foster et al. teaches scheduling a training session comprises receiving performance data for the contact agent (col. 5, lines 5-18).

Claim 50 is rejected for the same reasons as discussed above with respect to the third limitation of claim 29.

Claim 51 is rejected for the same reasons as discussed above with respect to

As to claim 52, Foster et al. teaches a computer-readable medium having computer-executable instructions for performing the steps recited in claim 23 (col. 3, lines 38-57).

7. Claims 32-38, and 57-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et al. (U.S. Patent 6,128,380) in view of Sanders et al. (U.S. Patent 6,574,605).

As to claim 32, Shaffer et al. teaches the steps of: accepting call center load data from the work distribution component operable for receiving and distributing incoming contacts (col. 4, lines 2-12); analyzing the call center load data to determine when to push a training session for the contact agent (col. 4, lines 8-12); and scheduling the training session so that the contact agent can accept training information without disrupting the interaction duties of the contact agent (col. 4, lines 10-17).

Shaffer et al. does not explicitly teach scheduling a training session for the contact agent.

Sanders et al. teach scheduling a training session for the contact agent (col. 6, lines 33-38 and lines 45-46; col. 23, lines 40-45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Sanders into the teachings of Shaffer for the purpose of informing the contact agent his or her training schedule so that he/she can have preparation prior to the training.

As to claim 33, Shaffer et al. teaches sending information related to the enqueued calls along with receiving information related to agent assignment and training (col. 4, lines 55-60). Shaffer et al. does not explicitly teach notifying the contact agent via an email message that the training session is scheduled. It would have been obvious to one of ordinary skill in the art at the time the invention was made sending information to agent would also be accommodated via email.

Claim 34 is rejected for the same reasons as discussed above with respect to claim 32.

As to claim 35, Sanders et al. teaches accepting agent performance data from a quality monitoring component (col. 17, lines 64-66); and analyzing the agent performance data (col. 6, lines 36-38; col. 10, lines 19-21) in combination with the call center load data to determine when to schedule the training session (col. 6, lines 45-46; col. 10, lines 59-60).

As to claim 36, Shaffer et al. teaches determining whether the contact agent is engaged in the interaction duties and in the absence of participation in the interaction duties, available to receive the training information (col. 5, line 66 through col. 6, line 3).

As to claim 37, Shaffer et al. teaches monitoring a work distribution component while providing the training information to the agent; and if a workload of the work distribution component exceeds a predetermined criteria, terminating the training information to enable the agent to engage again in the interaction duties (col. 6, lines 37-66).

As to claim 38, Shaffer et al. teaches a computer-readable medium having computer-executable instructions for performing the steps recited in claim 32 (Fig. 1; col. 3, line 62 through col. 4, line 6).

As to claim 57, Shaffer et al. teaches the steps of: receiving workload data from a device that monitors interactions between the agents and the contacts (col. 4, lines 2-12); planning to hold a training session (col. 6, lines 47-52 - *where Shaffer discussed if the workload is not decreased, the system waits and then later check again, hence holding a training session*).

Shaffer et al. does not teach processing the received workload data to identify a change in workload that has occurred in the past; projecting the change in workload into the future to predict a future time of decreased workload.

Sanders et al. teach processing historical call volume data to identify a call volume pattern in the historical call volume data (col. 10, line 66 through col. 11, line 2; col. 17, lines 64-64 and line 67 through col. 18, line 1); and projecting the change in

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workload (col. 8, lines 30-31) based on the identified call volume pattern (col. 10, line 66 though col. 11, line 2; col. 6, lines 35-38 and lines 45-46 - *where Sanders discussed the planner initiate training processes based on reviewing current and future requirements, hence one can identify the differences in call volume, for example, increased or decreased*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Sanders into the teachings of Shaffer for the purpose of supporting accurate volume forecasting to avoid unnecessary resource reallocation, as discussed by Sanders (col. 2, lines 53-56).

As to claim 58, Sanders et al. teaches identified change comprises an identified time that recurs weekly (col. 22, lines 26-31).

Claim 59 is rejected for the same reasons as discussed above with respect to the last limitation of claim 57.

As to claim 60, Shaffer et al. teaches the system offering the agents training session or continuing to service contacts if the queue becomes full (col. 6, lines 29-44). However, Shaffer et al. does not teach offering the agents an option of holding the training session or continuing to service contacts. It would have been obvious to one of ordinary skill in the art at the time the invention was made incorporate the above-mentioned feature into the teachings of Shaffer for the purpose of having a more efficient system by allowing agents to select and decide when they are ready for training.

8. Claims 53-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et al. (U.S. Patent 6,128,380) in view of Sanders et al. (U.S. Patent 6,574,605).

As to claim 53, Shaffer et al. teaches the steps of: a communications network that supports communication between an agent of the organization and the constituents (col. 3, line 62 through col. 4, line 6); receiving data and workload data and delivering training session for the agent based on the agent's availability to accept training (col. 3, lines 19-23; col. 4, lines 8, lines 17); and an information delivery component adapted to deliver information to the agent during the training session (col. 4, lines 10-12).

Shaffer et al. does not explicitly teach about scheduling and agent's predicted availability to accept training.

Sanders et al. teaches scheduled training session (col. 23, lines 40-45); and predicting future planning, training planning based on forecasted data (col. 10, lines 56-67; col. 23, lines 40-47).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Foster into the teachings of Shaffer and further modify Sanders to schedule a training session for the agent based on the agent's predicted availability for the purpose of better managing and load balancing call center according the scheduled information and scheduled a training for the agent based on agent's predicted availability.

As to claim 54, Shaffer et al. teaches the workload data is agent workload data (col. 3, lines 18-19; col. 4, lines 8-10).

As to claim 55, Shaffer et al. teaches the workload data is organization workload data (col. 3, lines 17-18 - *waiting queue in call center*).

As to claim 56, Shaffer et al. teaches determining whether the agent is available to receive information during the scheduled training session (col. 4, lines 8-12).

### ***Double Patenting***

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 23-60 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-44 of U.S. Patent No.

6,628,777. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the claims of the instant application and the U.S. Patent No. 6,628,777 present a method for connecting customers to one of the plurality of operators in a multimedia telecommunication system. Claims 23-60 of the instant application substantially correspond to claims 1-44, respectively, of U.S. Patent No. 6,628,777.

***Response to Arguments***

11. Applicant's arguments with respect to claims 23-60 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quynh H. Nguyen whose telephone number is 571-272-

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7489. The examiner can normally be reached on Monday - Thursday from 6:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan, can be reached on 571-272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Quynh H. Nguyen**  
**Primary Examiner**  
**Art Unit 2614**